

Exploring Java. (Second edition). By Patrick Niemeyer and Joshua Peck. O'Reilly, Sebastopol, CA. (1997). 594 pages. \$32.95.

Contents:

Preface. 1. Yet another language? 2. A first applet. 3. Tools of the trade. 4. The Java language. 5. Objects in Java. 6. Relationships between classes. 7. Working with objects and classes. 8. Threads. 9. Basic utility classes. 10. Input/output facilities. 11. Network programming with sockets and RMI. 12. Working with URLs. 13. The abstract window toolkit. 14. Creating GUI components. 15. Layout managers. 16. Drawing with AWT. 17. Working with images. 18. Java beans. Glossary. Index.

Differential Equations with MathematicaTM. By Kevin R. Coombes, Brian R. Hunt, Ronald L. Lipsman, John E. Osborn and Garrett J. Stuck. John Wiley & Sons, Inc., New York (1998). 240 pages. \$19.95.

Contents:

1. Introduction. 2. Getting started with *Mathematica*. 3. Doing mathematics with *Mathematica*. 4. Using *Mathematica* notebooks. 5. Solutions of differential equations. 6. A qualitative approach to differential equations. 7. Numerical methods. 8. Features of *Mathematica*. 9. Qualitative theory of second order linear equations. 10. Series solutions. 11. Laplace transforms. 12. Higher order equations and systems of first order equations. 13. Qualitative theory for systems of differential equations. Sample notebook solutions. Index.

Managing Usenet. By Henry Spencer and David Lawrence. O'Reilly, Sebastopol, CA. (1998). 492 pages. \$32.95.

Contents:

Preface. 1. Introduction. 2. Getting ready. 3. News operations. 4. Installing C News. 5. Configuring C News. 6. Running C News. 7. Installing INN. 8. Configuring INN. 9. Running INN. 10. Choosing and installing Newsreaders. 11. You're a network manager now. 12. Leaf nodes. 13. Hub nodes. 14. Gatewaying. 15. Moderating newsgroups. 16. Newsgroups and their names. 17. A brief history of Usenet. 18. Anatomy of a news article. 19. Flow and processing of traffic. Index.

Essential Windows NT System Administration. By Eileen Frisch. O'Reilly, Sebastopol, CA. (1998). 467 pages. \$34.95.

Contents:

Preface. 1. Administering Windows NT systems. 2. Startup, shutdown, and server configuration. 3. User accounts. 4. Managing processes. 5. Disks and filesystems. 6. Files and directories. 7. Backups. 8. Network configuration. 9. Print services. 10. Security. 11. Performance optimization. 12. Automating system administration. Appendices. A. Quick start for experienced UNIX system administrators. B. Useful Windows NT resources. C. Windows NT scripting language summary. Glossary. Index.

Automata and Computability. By Dexter C. Kozen. Springer-Verlag, New York. (1997) 400 pages. \$39.95, GDM 64.00, GBP 24.50.

Contents:

Preface. Lectures: Introduction. Finite automata and regular sets. Pushdown automata and context-free languages. Turing machines and effective computability. Exercises: Homework sets. Miscellaneous exercises. Hints and solutions. References. Notation and abbreviations. Index.

Statistical Tests for Mixed Linear Models. By André I. Khuri, Thomas Mathew and Bimal K. Sinha. John Wiley and Sons, New York. (1998). 352 pages. \$69.95.

Contents:

Preface. 1. Nature of exact and optimum tests in mixed linear models. Appendix 1.1. Distribution of a maximal invariant $T(x)$: Wijsman's representation theorem. 2. Balanced random and mixed models. 3. Measures of data imbalance. Appendix 3.1. Hirotzu's approximation. 4. Unbalanced one-way and two-way random models. 5. Random models with unequal cell frequencies in the last stage. 6. Tests in unbalanced mixed models. Appendix 6.1. Proof of Lemma 6.3.2. 7. Recovery of inter-block information. 8. Split-plot designs under mixed and random models. Appendix 8.1. Some results on the validity and optimality of F -tests. 9. Tests using generalized P -values. 10. Multivariate mixed and random models. Appendix: Solutions to selected exercises. General bibliography. Author index. Subject index.

Modeling Dynamic Biological Systems. By Bruce Hannon and Mathias Ruth. Springer-Verlag, New York. (1997). 399 pages. \$59.95, GDM 88.00. CD ROM included.

Contents:

Foreword (Simon A. Levin). Series preface. Preface. Part 1. Introduction. Part 2. Physical and biochemical models. Part 3. Genetics models. Part 4. Models of organisms. Part 5. Single population models. Part 6. Multiple population models. Part 7. Catastrophe and self-organization. Part 8. Conclusion. Appendix. Madonna. References. Index.